

Amendments to the Specification:

Please insert before sub-heading "BACKGROUND OF THE INVENTION" on page 2 of the specification the following new section:

CROSS REFERENCE TO RELATED ART

A1 This application claims the benefit of Korean Patent Application No. 2000-79742, filed on December 21, 2000, which is hereby incorporated by reference in its entirety.

Please amend paragraph 47 as follows:

A2 [47] As shown in FIG.2, each of the PSTN interface 20 and the IP network interface 60 includes a PBA printed board assembly (PBA) 110, a first parallel-to-serial converter 120, a second parallel-to-serial converter 140, a serial-to-parallel converter 130, a port scan bit (PSB) memory 150, and a data bus buffer 160. The PBA 110 provides state data of the PSTN 50 and the IP network 60. The first parallel-to-serial converter 120 converts state data of a hard disk drive (HDD) module to serial data. The second parallel-to-serial converter 140 converts parallel input state data of a fan and cables to serial data. The serial-to-parallel converter 130 converts the data from the first and second parallel-to-serial converters 120 and 140 to parallel data, and adds the parallel data to state data of ejection, injection, and operation of boards, input in parallel from the PBA 110. The PSB memory 150 stores the data output from the serial-to-parallel converter 130 in corresponding addresses. The data bus buffer 160 transmits the state data stored in the PSB memory 150 to the system controller 10 so as to monitor the failure.

Please amend paragraph 54 as follows:

A3 [54] The collected alarm data are periodically stored in the PSB memory 150 in an 8-bit parallel type from the serial-to-parallel converter 130 under the control of the system control controller ~~department~~ 10.

Please amend paragraph 60 as follows:

A4 [60] The Internet telephony gateway in FIG. 4 includes a PSTN interface module 210, an IP network interface module 220, a data processing module 230, and a control module 240.

A4
The PSTN interface module 210 is in interface with the PSTN and generates a failure alarm when a failure occurs in the PSTN. The IP network interface module 220 is in interface with the IP network and generates a failure alarm when a failure occurs in the IP network. The data processing module 230 performs a data processing procedure required for data exchange between the PSTN and the IP network.

Please amend paragraph 68 as follows:

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[68] Subsequently, after a corresponding channel of ~~the~~ PSTN 50 has been blocked (S24), the system controller 10 restores the call of the terminal unit for the IP network (S25).

Please amend paragraph 72 as follows:

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[72] First, call connection between a subscriber terminal unit for the PSTN 50 and a subscriber terminal unit for the IP network 60 is attempted (S31). Subsequently, the system controller 10 determines, based on data written in the PSB memory 150, whether a failure alarm has occurred in the IP network ~~50~~ 60 of the PBA 110 and a connecting board of ~~the~~ IP network ~~50~~ 60 (S32).

Amendment to the Title:

Please amend the original title of the application to read:

A7 "NETWORK-BASED TELEPHONY GATEWAY AND NETWORK-BASED
TELEPHONY METHOD"